

ABSTRACT

FERROMAGNETIC OBJECT DETECTOR

- 5 An apparatus for detecting ferromagnetic objects in the vicinity of a magnetic resonance imaging scanner. The apparatus comprises primary sensor means adapted to measure a magnetic field, arranged in communication with signal processing means configured to identify temporal variations in the measured magnetic field due to the movement of a ferromagnetic object within an ambient
- 10 magnetic field and to provide an output indicative of the presence of a ferromagnetic object in the vicinity of the primary sensor means. The apparatus further comprises secondary, non-magnetic, sensor means adapted to detect the movement of objects in the vicinity of the primary sensor means in order to reduce false alarms. The output from the signal processing means may be used to operate an audible alarm, a visual
- 15 alarm, an automatic door lock or a physical barrier.

[Figure 4 should accompany the abstract]